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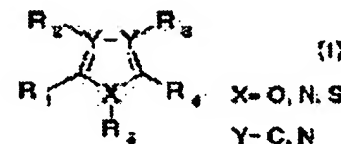
TANAKA HIROMITSU

(54) ORGANIC ELECTRIC FIELD LIGHT-EMITTING ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a superior white light emitting organic EL element.

SOLUTION: This has at least an organic light-emitting layer and an electron transport layer wherein a compound shown in the formula (1) is used. As for the compound of the electron transport layer, the energy gap obtained from an optic absorption end is 3.0 eV or more, and the absolute value of HOMO level is larger than that of the HOMO level of light-emitting material of the neighboring organic light-emitting layer (the blue light-emitting layer). The light-emitting layer has a laminated structure of blue light-emitting layer of emission wavelength of 400 to 500 nm and a light-emitting layer of emission wavelength of 550 to 600 nm in the complimentary color relationship to this blue. Because the electron transport layer exerts a high positive hole block function, blue light-emitting efficiency increases, and blue color purity can be improved, and a superior white light emission is obtained. If a single layer of the blue color light-emitting layer and the electron transport layer are combined, a blue light-emitting organic EL element of a high color purity can be realized.



* R₁とR₂及びR₃とR₄、R₂とR₃は環を巻いても良い。

LEGAL STATUS

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